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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/542,611	04/04/2000	Dana Swift		5370
7590	06/16/2004		EXAMINER	
J Steven Gardner Kilpatrick Stockton LLP 1001 West Fourth Street Winston-Salem, NC 27101			DESIR, JEAN WICEL	
			ART UNIT	PAPER NUMBER
			2614	
			DATE MAILED: 06/16/2004	

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)
	09/542,611	SWIFT ET AL.
	Examiner	Art Unit
	Jean W. Désir	2614

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) Responsive to communication(s) filed on 01 April 2004.
- 2a) This action is **FINAL**. 2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) Claim(s) 1-34 is/are pending in the application.
 - 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) Claim(s) 26 is/are allowed.
- 6) Claim(s) 1-5,9-11,14,24,25,27,28 and 30-34 is/are rejected.
- 7) Claim(s) 6-8,12,13,15-23 and 29 is/are objected to.
- 8) Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on _____ is/are: a) accepted or b) objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) All b) Some * c) None of:
 1. Certified copies of the priority documents have been received.
 2. Certified copies of the priority documents have been received in Application No. _____.
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) Notice of References Cited (PTO-892)
- 2) Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
- 4) Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) Notice of Informal Patent Application (PTO-152)
- 6) Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1, 2, 11, 14, 24, 25, 27, 30 rejected under 35 U.S.C. 103(a) as being unpatentable over Bozdagi (US 5,784,115).

Claim 1:

The claimed "capturing a complete frame of an interlaced video image, the complete frame having a first raster field and an interlaced second raster field" is disclosed, see col. 4 lines 34-36, Fig. 9;

the claimed "automatically correcting for camera motion; automatically correcting for subject motion" is disclosed, see col. 2 line 59 to col. 3 line 24 where automatically corrected for camera motion (global motion) and subject motion (local motion) happened as claimed;

the claimed "and displaying an image corrected for camera motion and subject motion" is disclosed, see col. 10 lines 60-63, Fig. 22, where an image corrected for camera motion (global motion) and subject motion (local motion) is displayed as claimed;

the added claimed limitation “comprising locating optimal correlation values for each pixel in the first raster field relative to a reference pixel in the second raster field to create a two-dimensional motion vector between each pixel in the first raster field and the reference pixel in the second raster field” is not explicitly disclosed, verbatim, by Bozdagi. However, the structure of the claimed limitation is a very well known procedure in the art used in motion compensation to produce improved quality image. An artisan would be motivated to implement this well procedure in Bozdagi’s disclosure to arrive at the claimed invention; this implementation would correct artifacts due to camera motion for instance, and result in good quality picture. Therefore, the claimed invention would have been obvious to a person of ordinary skill in the art at the time the invention was made.

Claim 2 is disclosed, see col. 6 lines 34-38.

Claim 11 is disclosed, see col. 3 lines 19-24.

Claim 14 is disclosed, see col. 10 lines 29-38.

Claim 24 is disclosed, see col. 2 lines 59-65.

Claim 25:

Bozdagi’s disclosure would have rendered claim 25 obvious to an artisan; Bozdagi’s disclosure is not limited to a specific environment; an artisan would be motivated to use Bozdagi’s disclosure in medical environment, for instance “during surgical procedures” as claimed in claim 25, because Bozdagi’s disclosure would provide high quality images for surgeons to examine. Therefore, the claimed invention

would have been obvious to a person of ordinary skill in the art at the time the invention was made.

Claim 27:

The “an image recording camera for capturing complete frames of video images; a digital capture unit for processing live video images and captured frames of video images” is disclosed, see Fig. 5 items 400, 300, col. 4 lines 32-36, col. 2 line 60;

the claimed “a first filter for automatically correcting for camera motion; a second filter for automatically correcting for subject motion” is disclosed, see col. 6 lines 28-39, col. 2 line 59 to col. 3 line 24;

the claimed “a video monitor for displaying images” is disclosed, see col. 4 line 46 where the output device is considered as a video monitor for displaying images as claimed;

the added claimed limitation that further limits claim 27 is rejected for the same obvious reasons as claim 1.

Claim 30 is disclosed, see col. 10 lines 60-63.

3. Claims 3-5, 9, 10, 28 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bozdagi (US 5,784,115) in view of Topper (US 6,545,719).

Claim 3:

The claimed “performing auto-correlation on the first raster field with respect to the second raster field” as claimed in claim 3 is not explicitly disclosed by Bozdagi. However, performing auto-correlation as claimed is a very well known procedure in the

art used in motion compensation that would result in producing improved quality image, as evidence see Topper at col. 6 lines 8-20. An artisan would be motivated to combine the references to arrive at the claimed invention; this combination would correct artifacts due to camera motion for instance, and result in good quality picture. Therefore, the claimed invention would have been obvious to a person of ordinary skill in the art at the time the invention was made.

Claims 4, 5 are disclosed, see Topper at col. 6 lines 8-20.

Claim 9, 10 are disclosed, see Topper at col. 7 lines 19-37.

Claim 28 is rejected for the same reasons as claims 3-4, and 9-10.

4. Claims 31-34 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bozdagi (US 5,784,115) in view of Branson (US 5,877,819).

Claim 31:

The claimed "a freeze mode for freezing live video images and displaying frozen images on the video monitor" is not explicitly disclosed, verbatim, by Bozdagi. However, freeze mode as claimed is very well known procedure in the art used for freezing live video images and/or for toggling between frozen and live images, as evidence see Branson at col.3 lines 36-44. An artisan would be motivated to combine the references to arrive at the claimed invention, this combination would allow users to freeze live images and/or toggle between frozen and live images. Therefore, the claimed invention would have been obvious to a person of ordinary skill in the art at the time the invention was made.

Claim 32 is disclosed, see Branson at col. 3 lines 36-44, Bozdagi at col. 4 lines 34-36.

Claim 33 is disclosed, see Branson at Fig. 1 item 12.

Claim 34 is disclosed, see Branson at Fig. 1 item 18, col. 6 lines 21-23, and also Bozdagi at col. 4 lines 46-47.

Allowable Subject Matter

5. Claims 6-8, 12, 13, 15-23, 29 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.
6. **Claim 26 is allowed.**

Response to Arguments

7. Applicant's arguments have been considered but are moot in view of reinterpretation of the references necessitated by the amendment.

Conclusion

8. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within

TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jean W. Désir whose telephone number is (703) 308 9571. The examiner can normally be reached on 5/4/9 - First Friday Off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John W. Miller can be reached on (703) 305 4795. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

JWD
Jun. 14, 04



MICHAEL H. LEE
PRIMARY EXAMINER